SOLID FREE-FORM FABRICATION OF SOLID THREE-DIMENSIONAL OBJECTS

ABSTRACT OF THE DISCLOSURE

The present invention is drawn toward systems and methods for free-form fabrication of solid three-dimensional objects. In one embodiment, a solid free-form fabrication system for producing a three-dimensional object can comprise a dispensing system adapted to dispense a build material having nanofiller particulates dispersed therein; and a curing system adapted to harden the build material after being dispensed. In another embodiment, a method for producing a three-dimensional object can comprise steps of a) forming a jettable build composition including build material having nanofiller particulates dispersed therein; b) jetting a portion of the build composition to form a build layer; c) curing the build layer; and d) repeating steps b) and c), wherein multiple build layers are contacted and accrued to form a three-dimensional object.